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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,236	05/04/2001	Ulrich R. Bernier	0148.01	7271
25295 7.	590 10/22/2002			
USDA, ARS, OTT 5601 SUNNYSIDE AVE RM 4-1159			EXAMINER	
			CHOI, FRANK I	
BELTSVILLE, MD 20705-5131			ART UNIT	PAPER NUMBER
			1616	
		DATE MAILED: 10/22/2002	8	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
· ·		09/848,236	BERNIER ET AL.			
Office Action Summary		Examin r	Art Unit			
		Frank I Choi	1616.			
	ommunication app	ars on the cov r sheet with the	correspondence address			
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM						
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status						
1) Responsive to communicati	ion(s) filed on <u>18 Ju</u>	<u>ıly 2002</u> .				
2a) ☐ This action is FINAL.	2b)⊠ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4) \boxtimes Claim(s) $46,47,54-56,58,59,67-70,73-75,77-79$ and $81-101$ is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>47,58,59,74,75,84,85,87,88 and 99</u> is/are allowed.						
6)⊠ Claim(s) <u>46,54-56,67-70,73,77-79,81-83,86,89-98,100 and 101</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15) ☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing F 3) Information Disclosure Statement(s) (PTC	,	5) Notice of Informa	ry (PTO-413) Paper No(s) I Patent Application (PTO-152)			
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)	Office Acti	on Summary	Part of Paper No. 8			

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DETAILED ACTION

Allowable Subject Matter

Claims 47,58,59,74,75,84,85,87,88 and 99 allowed subject to update of the prior art search herein.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim Rejections - 35 USC § 102/103

Claims 70, 78 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious Granata et al. for the reasons of record and the further reasons below.

Granata et al. expressly disclose a product comprising lactic acid, acetone, 2-butanone, 2,3-pentanedione, 2-heptanone, 3-hydroxy-2-butanone, diacetyl, acetaldehyde, ethanol, hexanol, trichloromethane, 2-ethyl furan, benzene and dimethyl disulfide falling within the scope of applicant's claims (Pg. 333-34, Lactic acid production, Pg. 335, Table 8, Volatile compound composition).

Examiner has duly considered Applicant's argument but deems them unpersuasive.

In response to applicant's argument that the prior art reference does not teach how to make or use the composition to attract mosquitoes, a recitation of the intended use of the claimed

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invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). With respect to mosquito attracting amounts, the prior art composition contains an amount of the claimed compounds and the Specification mentions at the low range "about 1%" but that that the amounts can vary based on several factors. As such, it appears that the prior art composition falls within the broad scope of the limitation "mosquito attracting amounts". Also, so long as the prior art expressly discloses a single composition containing the claimed compounds, it is immaterial that the prior art also teaches other compositions not having the claimed compounds. Examiner reminds Applicant that in a 102/103 inherency based rejection the Graham v. John Deere factors are not applicable. As such, Applicant's arguments relative to non-analogous art and obviousness do not appear to overcome the rejection herein.

Claims 46, 73, 78, 86, 89, 91 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 98/26661 for the reasons of record and the further reasons below.

WO 98/26661 expressly discloses compositions comprising lactic acid and limburger cheese for attracting arthropods, including mosquitos falling within the scope of applicant's claims (Page 13, lines 13-30, Page 14, lines 1-3, Page 19, lines 5-26). Limburger cheese contains acetone, 2-pentanone and dimethyl disulfide (See Seitz et al., Pgs. 3665,3672 (cited here

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solely for purposes of providing extraneous evidence of the volatile compounds contained in limburger cheese).

Examiner has duly considered Applicant's arguments but deems them unpersuasive.

Applicant argues that Examiner has not provided a references which teaches that limburger cheese contains the claimed compounds. The compounds are inherently contained in limburger cheese, nevertheless, Examiner has provided the extraneous evidence above. Applicant argues that the additional ingredients of the limburger cheese would materially effect the claimed invention, however, the prior art teaches that the prior art composition is effective in attracting mosquitoes. As such, Applicant does not appear to have shown how the other ingredients would materially affect the claimed invention. Further, Examiner is not picking or choosing among the isolated disclosures. The prior art expressly disclose a composition and method of attracting mosquitoes comprising lactic acid and limburger cheese (limburger cheese contains acetone, 2-pentanone and dimethyl disulfide).

Claims 54, 67, 68, 81, 93, 94 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Carlson et al. (Yellowfever Mosquitoes:Compounds Related to Lactic Acid that Attract Females).

Carlson et al. expressly discloses a method and composition for attracting mosquitoes containing glycolic acid and acetone or pyruvic acid and acetone falling within the scope of applicant's claims (Pg. 330, Table 1)

Alternatively, at the very least the claimed invention is rendered obvious within the meaning of 35 USC 103, because the prior art discloses products and uses that contain the same exact ingredients/components as that of the claimed invention. See In re May, 197 USPQ 601,

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607 (CCPA 1978). See also Ex parte Novitski, 26 USPQ2d 1389, 1390-91 (Bd Pat. App. & Inter. 1993).

Claims 54-56, 67-69, 77-79, 81-83, 89-98, 100,101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson et al. in view of Balfour, Paganessi et al. and Wilson et al...

Carlson et al. teaches that lactic acid is an effective mosquito attractant and that glycolic acid, glycolic acid and acetone, pyruvic acid and pyruvic acid and acetone when compared with lactic acid are also effective mosquito attractants (Pg. 330, Table 1, pg. 331).

Balfour (US Pat. 4,907,366) teaches the combination of lactic acid and carbon dioxide for attracting mosquitoes (See entire document).

Paganessi et al. (US Pat. 5,943,815) teach that acetone acts synergistically with carbon dioxide as an attractant for mosquitoes (Column 2, lines 53-68, Column 3, lines 1-25).

Wilson et al. teaches that dimethyl disulfide is effective in attracting mosquitoes (Column 8, lines 44-60).

The difference between the prior art and the claimed invention is that the prior art does not expressly disclose compositions containing glycolic acid and carbon dioxide; lactic acid acetone and carbon dioxide; and lactic acid and dimethyl disulfide and a methods for attracting mosquitoes containing glycolic acid and carbon dioxide; lactic acid and acetone; lactic acid acetone and carbon dioxide; and lactic acid and dimethyl disulfide. However, the prior art amply suggests the same as lactic acid, glycolic acid, acetone, dimethyl disulfide and carbon dioxide are known in the art to attract mosquitoes. As such, it would have been well within the skill of and one of ordinary skill in the art would have been motivated to modify the prior art as above with the expectation that the composition would be effective in attracting mosquitoes.

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Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Conclusion

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machines are (703) 308-4556 or (703) 305-3592.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (703) 308-0067. Examiner maintains a flexible schedule. However, Examiner may generally be reached Monday-Friday, 8:00 am - 5:30 pm (EST), except the first Friday of the each biweek which is Examiner's normally scheduled day off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. José Dees, can be reached on (703) 308-4628. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (703) 308-1235 and (703) 308-0198, respectively.

FIC

October 18, 2002

JOHN PAK PRIMARY EXAMINER GROUP 12 23

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